

LAKE. MANAGERS CONVENE AT COLGATE U.

A fine collection of speakers were enjoyed by the 165 lake association representatives who attended the 4th annual New York State Lake Associations Conference held at Colgate University Campus. The conference serves as a forum for airing important water quality issues and for administering guidance for the management of lakeshore properties. Participants voiced that in addition to absorbina vastand versified assemblage of scientific information, they found of special value were the personal contacts they made with other lake association representatives. It is one of the rare opportunities to share experiences about the failures and successes of individual lake management techniques.

A gathering of people met casually on Friday night to address the topics of zoning and lake use regulations and of lake management districts. Some 45 persons (only 10 were anticipated).were given the opportunity to participate in a discussion which focused on evaluating various shoreland zoning problems such as or deeded -access and "keyhole" contractual development. Resources were given so that lake associations could follow up on suggestions for control of these situations. Many felt that this topic should become the theme of the 1987 conference. Also explained and assessed were special districts known as lake management, weed, tax, watershed, or dam districts. As these districts become increasingly popular, so does the need for the federation to research and evaluate each kind of district and perhaps develop a model watershed district to distribute among the memberships. The group suggested that perhaps next years friday night group could be divided into small regional groups (le:Catskill, Finger Lakes. Adirondack Regions), to discuss specific issuof common interest.

The stimulating friday session set the stage for the scientific speakers and panels that followed over the next 2 days. Reports are being prepared on each individual session. Bruce Gilman introduced the members of the Scientific Advisory Board to the membership and described its function within the organization of the Federation of Lake Associations.

The Board received an enthusiastic response from the audiience and many suggested that there be even more interaction with the Advisory Board next year.

TI1e Citizens Statewide Lake Assessment Program was detailed by Dr.jim Sutherland and Scott Kishbaugh from DEC. They outlined the training procedure of the volu1nteers and the parameters of the water quality testiing program. To bring the membership up to date, the CSLAP program was initiated in late June when Sco;tt Kishbaugh and Tracey Clothier made the first of three trip cycles to the 25 lakes that are part of this years program. They distributed over \$10,000 in equipment and supplies and estimated that they trained 150 volunteers.

Alt the Saturday evening dinner, Senator Nancy Lorraine Hoffmann offered a fascinating talk about an array of environmental legislative Issues. She praised the federation for working in cooperation with DEC in the design and implementation of the Citizens Statewidte Lake Assessment Program.

Assemblyman Maurice Hinchey, chairman of Environmental Conservation Committee, recognized the inHuence which the Federation has had in the development of many important pieces of legislation this year. He also discussed the various Impacts of shoreline over-development and sited the apparent rece:nt Introduction of eurasian milfoil in Lake George. He alphealed to the conferees to become involved in preventative maintenance programs in New York lakes streams. He outlined the states history of supporting bond acts for the environment dating back to 1909 and called for Federation membership support of the "Environmental Quality Bond Act of 1986" that will be on the ballot for the Novembergeneral election.

TI1e conference was organized jointly by Federation Vice-President Mark Randall, and Bruce Gilman, 1985 Scientific Advisory Board Chairman. They deserve hearty congratulations for a job well done. Next years symposium will be held at SUNY Oswego on lake Ont.ario and will be arranged by Warren flint.



WEEDS AND SOME OTHER PIANTS

by Hermall S. Forest

How to waste your money:

1 became a lake consultant in 1966, when the President of my College asked me to talk with Conesus Lake Association's officers and the watershed inspector. I found that a half-dozen hard-headed business and professional men were about to spend \$40,000 for a "weed" cutter, and planning to lodge an attack on the plants in the lake with it. My advice then, and now, is for individual owners to pull up plants or loop a line into the lake and pull on the ends,IF THE PLANTS AREREALLY IN THE. WAY. Three years later the Conesus residents were the first to face voting a bond issue (6,000,000) for the largest perimeter sewer ever built. The air was thick with alarm and promise. My surmise was that not too much should be expected.the only realistic expectancy was that the lake would not get worse. So. they voted the bonds, but never did buy the weed cutter.

The next twenty years were spent in studying the ecology of the complex. intriguing lake ecosystems. My companions in research from a half-dozen other academic institutions in New York and I were on the lakes summer and winter, and we teamed a new way of looking at lakes, and of managing them. It is generally called the ecosystem approach. Most sadly, I now find that the public and their elected representatives seem less able to make rational decisions now, than then. Twenty years ago the public was uninformed. now it is misinformed.

1 am particularly sensitive to the current crusade against "weeds." Submersed aquatic vegetation (rooted aquatics, or macrophytes) have been my special window into the workings of the ecosystem. A report In the New York Times (May 4. 1986) was headlined, "Lake George Confronts a Noxious Weed." "Eurasian Milfoil," a submersed plant, has been "discovered" in Lake George. "The weed is like steel wool," a local spokesman said, "If we don't act now to clean up the lake, we're going to have a tremendous deterioration in its quality in the future." Both statements are demonstratively false. No rooted aquatic will degrade the waters of Lake George.

There is a rational approach to be taken when one notices a plant in a lake for the first time. What is it? Myriophyllum spicatum L (better called spiked milfoil since there are other Eurasian milfoils) may have been unnoticed. The next step is to consult the historic record using dried plants preserved In herbaria There are a number of large plant collections in the state. Unfortunately, collecting and preserving specimens became unfashionable In science, and we have no records for the time when plant migrations and exterminations may have occurred. I have however, been able to trace the vegetation of some lakes from the 1860's. Spiked milfoil entered upstate New York waters noticeably at some time between 1939 and 1960. It would be strange if it did not reach Lake George until1985.

Instead of seeking accurate information, the response at Lake George and elsewhere has been to tum directly to legislators (who are no better informed than their constituents) for money to do blind damage by killing plants. It is incredible to me that int:lligent

adults who grew up during the environmentalenlightenment, are anxious to kill plants without considering the e nvironmental impact. Unfortunately. "weed" killing is exempt from the SEQRA (State Environmental Quality Review Act) requirement for an environmental impact study.

Misinformation is now available in greater quantity than 20 years ago. The state has supported studies performed by naive students under Inexperienced overs.eers. Conscientious scientists make a lot of stupid mistakes at first, but they do not rush them into print. Science has a quality controlmechanism in peer review. but New York is spending money with no quality control. The other major source of misinformation is the corps of equipment salesmen which hardly existed 20 years ago. Very few of them know anything about the possible consequences of killing aquatic plants. E.ven the best informed commercial people will rarely give the benefit of the doubt to leaving plants alone, althoough there are a few well informed and highly scrupulous people who must make their living selling cutting machines, plant poisons or light screens.

Given the present situation of insufficient or unrelable information, it is not prudent to spend public, money. on power machinery or chemicals.

A brief introduction to lake-plant relationships:

A -- What is a weed?

Four definitions have been used. The first three can be determined objectively, and are ecologically defined:

- I. J\pioneer plant, which can colonize open ground. They make up the first stage of natural community succession.
- 2. A plant which spreads rapidly (under some particular conditions).
- 3. A plant which is "competitive" (growing better than some others in a particular environment and community).

It should be evident that these three characteristics can be viewed as desirable as well as undesirable. Cons.equently, number four is a purely subjective definition.

4. A weed Is an unwanted plant at some time or placE:. A number of plants which grow well on open ground (lawns, gardens) are not native. They are European garden flowers.

B -- Water weeds.

Virtually allof thespecies growingsubmersedin New York lakes are native. The community is as natural in Its environment as eastern forests or mid-western prairies are to theirs. The lake community in upstate New York waters commonly Indudes two introduced species... Crisped pond weed (Potamogeton crispus L.) entered in the 18th and 19th Centuries and is now a regular part of the community. Spiked milfoiientered occasionally in earlier times, but it spread rapidly only within the last half century. The species thrives in polluted waters. It did not displace native species which had already been elimi:nated by pollution. I have documented this pattern for Imndequoit Bay of Lake Ontario. Myriophyllum spicatum shares community space with native milfoils and other plants in New York waters. Nature has readjusted the ecosystem: after a typical peak of abundance. it has generally settled down to a share of community space.

The value of submersed aquatics: some insights from twenty years of scientific investigation. Submersed plants serve as keep instruments to reveal water quality. They remain in one place recording the physic: al and chemical changes which occur. At the lake George meeting in 1983, when the Federation was founded. a lake representative was wondering if her association should do something about its lake. I learned the kinds of plants growing there and told her that the lake was in good shape. My conclusions matched that of the DEC staff which had chemical and physic: al data collected over some time. My advise is do not destroy before you know what you are destroying!

The decline in water quality of New York lakes is revealed in the loss of species. Two Finger lakes. Conesus and Honeoye, have lost few species during the last century. Hemlock lake and Irondequoit Bay lost heavily. It was easy to tell that Irondequoit Bay was the most damaged water In the region, but I5 years ago. the lake investigators realized that Hemlock Lake, which LOOKED so good in beer advertisements, was a badly damaged ecosystem.

Submersed aquatic plants have a stabilizing effect on the lakes during environmental degradation. Data assembled from preserved specimens going back to the 1960's, show graphically that the lakes with the initial greatest diversity (number of spedes) suffered less than those with fewer species to begin with. Submersed plants are probably good for your lake.for example, they tie up nutrients which would otherwise be available to algae. For example, Conesus is one of the clearest of Finger lakes. and it is very fertile, probably producing the highest tonnage of submersed aquatic plants.

Decaying macrophytes can and do release nutrients which cause heavy, but short time "blooms" of algae (these should be understood and tolerated). Only in confined pond-like waters will decaying plants cause a significant oxygen deficiency by respiration or decay.

The ecologist turns pop psychologist. The Federation has wisely changed the title from one offts committees from "weeds and algae" to "aquatic vegetation". Once you label a plant "weed", It Is by definition unwanted, even dirty. A small army of hungry salesmen will encourage weed paranoia to the last extractable dollar. In the end, the lake resident will not get a cure, but a permanent capital and operational expense and the lake will probably get worse.

The moral of this story: Treatments performed in ignorance of basic understanding of the ecosystem are not likely to help. Such actions are more likely to harm vulnerable members of the plant community, and Improve the potention for those species which grow best In a disturbed environment. These then have the opportunity to become "weeds" In the scientific and perhaps in the popular sense.

The Federation and the author have many resources for basic information about lake ecology and lake management. Contact: Herman S. Forest, Ph.D., S.U. College of Arts and Sciences, Geneseo, NY 14454, 716-254-5279.





QUICK-LAUNCH MAJUNAS

Rlparians of New York- wah.:h over your Jakes- the quick-launch has arrived on the scene and it threatens the very character and environment of all lakes.

The quick-launch is a dry stack storage and launching facility. What makes It different from standard marinas Is that it provides services for the launching of virtually any size boat upon demand from the owner. The craft Is used and brought back general within a 24 hour period of time. It is then fork-lifted back into dry stack storage. The practice has become popular at Lake George where 3 project proposals are pending at this time.

Over 200 people turned out for a public hearing this summer regarding the application for a 280 boat quick launch operation in the tiny hamlet of Bolton landing. The project sponsor boasted the facilities capability of quick-launching 24 boats every hour. The controversy focuses aroung the sheer number of new boats (boats that did not have access before) to the already crowded waters of lake George.

Residents, neighbors of the project, and the Lake George Association voiced concern over the issues of lake surface, carrying capadty, the storage of fuel, security, noise factors, the management of stormwater and parking. Also of great conc,ern is that of a fire hazard. It is estimated that up to 6000 gallons of gasoline and diesel fuel could be s.tored In the tanks of these boats. The combination of stored fuel, the elements of fiberglass and wood and the method of storage (one over the other) could have a great potential for fire disaster.

Quick-launch marinas are highly likely to become popular on many many lakes and other water courses over the next 10 years. They are low maintenance, high profit facilities that will undoubtably replace the common marina



PROPRIETORSHIP OF LAKES AND WA"I"ER COURSES

by Armand L. Adams

CLASSIFICATION OF STREAMS AND LAKES

- I. PRIVATELY OWNED- NON NAVIGABLE
- State has no interest whatsoever in either the beds or banks.
- Waters are privately owned and can be used only by riparian owners.

CAZENOVIA LAKE, Madison Co.-CROTON LAKE., Putnam Co.-WILLOW POND. Suffolk Co.-LIME LAKE, Cattaraugus Co.-FISH LAKE, Oswego Co.-ST. MARY'S LAKE, Weschester Co.—TRIPP LAKE. Warren Co.—COPAKE LAKE, Columbia Co.-CROMWELL LAKE.Orange Co.

- In these waters riparian rights cannot be diminished by the state except on payment of compensation or In exercise of police power, as for example, pollution control.

-As to these privately owned,non-navigable streams and small lakes. it could conceivably be said that the riparian or riparians "own" the watercourse,but by such ownership, it must still be understood that the ownership does not include the water itself but the exclusive right to control the use of the water and to make such use of the stream or lake bed as the owner sees fit.

IL PRIVATELY OWNED. NAVIGABLE

- Upland owner has title to the bed as well as the banks of the stream or lake, but the public has an easement over the waters for the purpose of navigation.
- Waters which In natural condition are navigable in fact by boat. logs and the like.
- I.É. Middle sized lakes, -"capable of navigation and in fact navig ted by common carriers but where navigation Is confined within their boundaries".

In these lakes and streams, the riparian rights are recognized, subject to rights of the public for purpose of navigation:

GENESEE RIVER-OSWEGO RIVER-CHENANGO RIVER-CHITTENANGO CREEK-HEMLOCK IAKE—SKANFATELES LAKE-KEUKA LAKE

Also added to this category are streams not now navigable, but which once were such as the Chemung River; and small creeks like Six Mile and Cascadilla (in Ithaca) upon which even limited navigation is dependent upon dredging.

III. QUALIFIED OWNERSHIP

- State owns the bed of the stream,or lake but not the banks.
- Here the State has an "easement" over the waters to which the riparian rights. if any, are subordinate. not only for navigation, but perhaps also for other uses.
- Here the riparians title extend not to the thread of the stream or the middle of the lake, but to thebanks or shore.

Three sub groups:

(a) BOUNDARY WATERS: THE GREAT LAKES — LAKE CHAMPLAIN-NIAGARA RIVER-ST. LAWRENCE RIVER

Some of the state's sovereignty is shared with the Federal Government whose right to control navigation is supreme.

State has assumed control over these waters for som!public purposes in addition to navigation, as for example. water power.

(b) LOWER HUDSON

Rip•arian only owns to high water mark and state's title !xtends to high water subject to the easement of the riparian to use the foreshore for access to and from his uplands and the water.

(c) U\RGE LAKES WITH NAVIGABLE CONNECTIONS

No,t only are these lakes navigable in themselves, but they are connected by natural water courses so that transjportation by boat from one lake to another is possible.

In this category are the eastern Finger Lakes and their inter-relating stream system, and Oneida Lake and its connections with the canal system.

Oneida, Cayuga and Seneca Lakes are a part of the Barge Canal System and maybe subject to some of the rules applicable to canals.

Lakes in which the courts have indicated the state owns, the bed include:

SENECA LAKE-CAYUGA LAKE-LAKE GEORGE-ONEIDA LAKE

IV. ABSOLUTE OWNERSHIP

Wetter courses in which both the beds and the banks are owned by the state, and over which the state has full control as to both the land and the waters flowing in it.

As to these, the state is both proprietor and sove1-eign.

(a) CANAL WATERS

No' riparian rights, either because there never has been any as in the Dutch Settlement portion of the Mohawk River, (and used as canal) or because rights which formerly existed have since been extinguished when the lands were acquired by the state.

(b) S/VALL LAKES AND STREAMS WHOLLY INCLUDED WITHIN STATE OWNED LANDS

As proprietor, the state owns vast acreage in Catskill and Adirondack Parks. Other park lands, such as Allegany are also extensive. In these areas there are numerous lakes and ponds including their inlets and outlets and extensive tributaries.

As to these water courses, the state as the upland owner is the riparian owner.

St.:nte can make full use of these waters while in the water course and can use the stream or lake beds as it sees fit, but there remains the question whether these waters could be used up or diverted by action of the state so as not to continue into their major rivers and watersheds such as the Black.Raquette, Allegheny or Delaware. for the use of riparians along those rivers.

Whether or not a water course is a public or private water, or fits in one of the four dassifications mentioned depends on the size of the lake or streams, whether or not iff is a navigable water-way, and the extent of the state land grant which created the legal title to the lands under water.

Thee state was once the proprietor of all land in the State. If it divested itself of the title to any land, whether above or under water, It no longer owns it. We look to the original patents (deeds) given by the Land Office.

If the Patent from the State Land Office included niL or a part of the stream or lake in the deed description, then the Stale divested itself of title to the lands under water; if the Patent

only conveyed lands to or bounded by a streatn or shore of the Jake (in the case of the lands in the Military Tract or the Phelps & Gorham Purchase), then the state retained the title to the land under the lake or stream.

Ukewise. the State may regain title to lands under water of which It may have previously divested itself,as, for instance, when the State buys lands for canal or other purposes.

With references to what private or public uses of water courses are permitted, the cases make a distinction between proprietorship (ownership) and sovereignty (governmental control).

As proprietor, the State can exercise much more control than It can as sovereign. As a sovereign, it can only deprive or diminish a private riparian owner of his or her riparian rights by due process of law. As a proprietor or owner, the State can do with the property (land under water) what it wishes.

If the State does not have either absolute or qualified ownership of the water course, its control is limited to its right to act in its sovereign capacity.

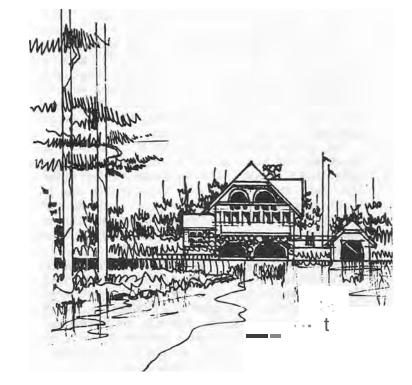
E.ven in private waters, the public has many rights and present day sovereign powers are every day encroaching on these private rights.

In addition to (a) the common right of the public for easements of navigation, boat anchorage and fishing and hunting. the state and federal governments have (b) limited private rights in waters by adverse possession.such as bridges and roads established years ago age acquiesced in,and (c) rights imposed by law for a public purpose, as for example:

- I. Taking by Eminent Domain.
- 2. Restrictions for Health (pollution) and Safety (flood control) under the State's police power or federal government under the general welfare clause.
- 3. Reservation by the State of ownership of natural wildlife and the right to protect the State's property by imposing restrictions on seasons and sizes and catch limits, and more recently regulations concerning and prohibitions against certain use of wet lands.
- 4. Protection of natural resources and the environment by the laws with respect to: WETLANDS, E.C.L Art. 24 S.E.Q.R., E.C.L Art. 8 MINERAL RE.SOURCE.S, E.C.L. Art. 23-FIOOD PLAIN MANAGEMENT, E.C.L Art. 36 WILD, SCENIC &. RECREATIONAL RIVERS, E.C.L Art. 15, Title 27 PROTECTION OFNATURAL ANDMAN MADE BEAUTY, E.C.L Art. 49 STREAM PROTECTION, E.C.L Art. 15, Title 5.

In order to effectuate a change in laws which will impair private rights under the authority of the State's police power or a federalgovernment'sgeneralwelfare clause, four factors must be considered:

- 1. The object regulated must be within the scope of the police power to serve a legitimate public end--public health, public safety or public welfare.
- 2. The means must be reasonable and not arbitrary or oppressive.
- 3. The legislation must not be a sham or a pretense. The exercise of the police power must bear a real and substantial relation to the legitimate public end.
- 4. The legislative classification must rest on a rational, reasonable basis.



LAKI STUDY ARCHIVES

by Paztl Gutmann

Studies, reports and data on lake water quality watershed management and fisheries are Increasingly being produced for lake associations. Government agencies, industries, high schools, colleges and unive1rsities are constantly producing such studies. Almo:st none of these papers are published or even catalo•gued, so this InformationIs largely unknown and thus umavailable to anyone but the few people directly involved with the study.

The Federation of Lakes Association is supporting my proposalto ask the membership to beat the bushes a littlEto find studies done on their lake of concern. Thus, the legwork can be spread thinly and will be leftin the hands of those best equipped to locate these studiE!S.

I have agreed to catalogue this information and to make a listing available to the Federation membership. Eventually, such an endeavor could easily grow to include a copying and lending service and later nto a Multifaceted lake resource center.

When a study is discovered, a copy should be sent to: Paul Gutmann — 301 Main Street — Lake Placid, New York 12946. Accompanying the study should be the following information written on a separate sheet:

- A The Title and/or Subject.
- B. The Date of the Study.
- C. The Author and Source of Copy.
- D.The Study's Cost.
- E. The Number of Pa es.

In the contemporary words of Bartles and Jaymes. "We thank you for your support".





HYDRIUA ALERT

There exists in the United States an exotic (non-native), submerged aquatic, Hydrilla verticillata, currently growing rampantly in many southeastern states and Louisiana, Texas. Iowa and California Hydrilla is incredibly adaptableand prolific, crowds out other plants and thrives in practically any aquatic environment. If hydrilla is by accident transported to New York, a potentially devastating situation would arise for its surface water resources.

The natural habitat for hydrilla is central Africa, Southeast Asia, Australia and Europe. Hydrilla exhibits a great deal of genetic variability worldwide. but in the U.S. there are presently only three strains, one in Alabama: another in Washington, D.C., Maryland and Delaware (very recently established); and a third in the remainder of its U.S. range. This indicates at least three separate introductions (Verkleij et at., 1983).

The Florida hydrilla was first noticed in 1960. Since that time it has become the most prevalent submerged problem week in that state. The Federal government during fiscalYear 1984 spent \$2.27 million controlling

7,161 acres of hydrilla by chemical and mechanical means In Florida public waters. Another 3,545 acres were chemically controlled and 1,025 mechanically controlled by the Florida Department of Natural Resources (Nelson&. Dupes, 1985).



Hydrilla Vt:rticillata

HydriUa stems are long and branched; leaves are oppositely positioned In the tower portions, but in whorls higher up. Each whorl includes two to eight leaves.

The leaves are colored dull to bright green. Their shape is oval, and their length is about five to seven times their width of two to four mm. The lower leaves are smaller than those positioned higher. Because they have serrated edges and one to three more spines along the central vein on their under sides, they feel harsh, coarse and brittle when drawn through the hand.

At the surface, and from near the growth tip. white flowers arise from the spathe. The spathe is thread like, and the flowers themselves inconspicuous, being only four to five mm across. The flowers are visible in late

The entire plant is rooted to tlhe bottom, but stem fragments break off and form t1o1:tting mats. summer or early fall. 6

Hydrilla reproduction is accomplished primarily vegetatively from stolons, rhizomes, fragmentation, turions and tubers. Reproduction may also be by seed where male and female flower producing (monoedous) strains exist, as in the Washington- Maryland-Delaware area, providing this noxious weed yet another means of surviving cc1ld winters. Hydrilla is very similar in appearance to elodea (Elodea canadensis).a native of temperate North America.

The Federation urges the public: to thoroughly clean and remove all plant fragments from their boats, motors and trailers after retrieval.and before launch,in general, and particularly if traveling to and from areas outside New York, to avoid accidlental introduction of hydrilla and/or other non-indigenous aquaticplants. Be especially cautious if visiting the Chesapeake Bay and returning to this state with a trail1ered boat.



WINKLER DISSOLVED OXYGEN by Paul Gutm.arm

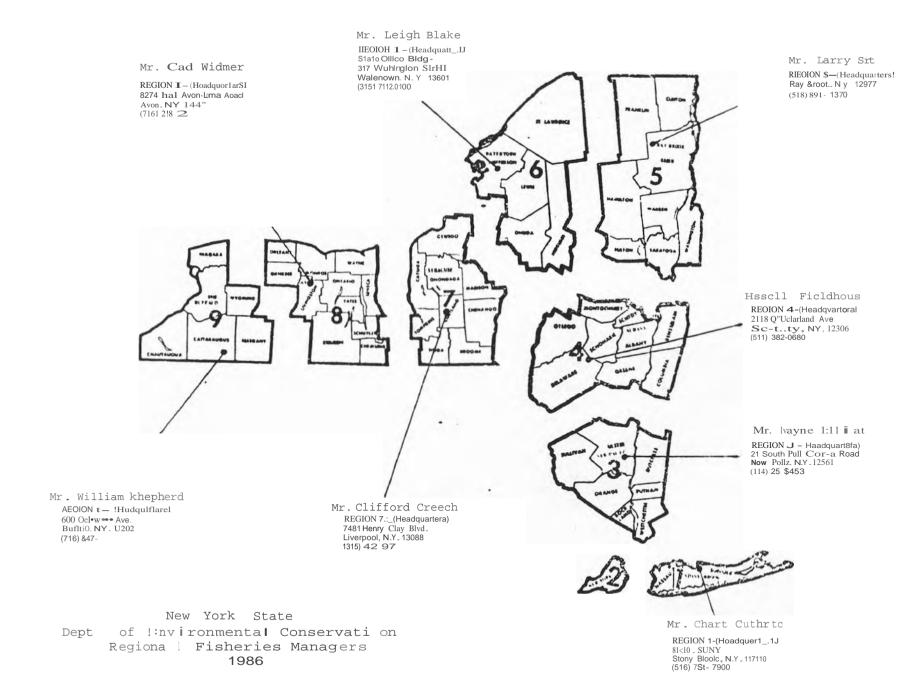
Many water quality conscious. people would like to monitor dissolved oxygen. Indeed, dissolved oxygen is one of the most important water quality parameters, especially with regard to the lake's or river's fishery. Itell limnology students that fish are constantly conscious of the dissolved oxygen content of the water through which they swim, and if any students don't believe me, they should immerse themselves and see how long they can ignore the need for oxygen!

Most dissolved oxygen monitoring is presently done with an instrument that carries a price tag of nearly \$1000.00. which is enough to discourage all but the most ardent amateur water quality monitor. However, the old fashioned wet chemil:trv Winkler method is still considered the most relliable method, and a scaled-down version of this method is available in the form of a kit that will do about1010 analyses for \$46.00. (Call the Hach Co. toll free for catalogue and ordering information, etc.: 800-Z27-4ZZ4) This kit is not as convenient as the instrument and is not as accurate as I would like to see it be, but is is adequate to provide a good introduction to dissolved oxygen monitoring. Also, this kit would certainly bee just what would be needed for some rough monitoriingthat would serve to justify the need for some more precise but perhaps expensive study.

The most annoying part of 1using the old Winkler method is the necessity of bringing an unaltered water sample up from the depths. The Hach Co. also sells a dissolved oxygen sampler for \$60.00.

Someone with a little tinkering skill can get set up to sample dissolved oxygen and do a state-of-the-art full scale Winkler test for about \$50.00. For details about equipment, sampling method and sample analysis procedures. write:Paul Gutmann,301 MainStreet,Lake Placid, New York 1Z946.





NEW YORK STATE DEPARTMENT OF ENVIRO NTAL CONSERVATION BUREAU OF PESTICIDES

REGION	COUNTIES	OFFICE LOCATION
1	Nassau, Suffolk	Bldg.40 SUNY Stony Brook ₁ -NY 11790 (516)751-7900
2	Bronx, Kings, New York, Queens, Richmcmd (New York City)	2 World Trade Center 61st Floor New York, NY 10047 (212)488-6146
3	Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, Westchester	21 South Putt Corners Rd. New Paltz, NY 12561 (914) 255•5453
4	Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady, Schoharie	2176 Guilderland Ave. Schenectady, NY 12306 (518)382-0680
5	Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren, Washington	Box 220, Hudson St. Warrensburg, NY 12885 (S1S)623-3671
6	Herkimer, Jefferson, Lewis, Oneida, St.Lawrence	Utica State Office Bldg. Utica, NY 13501 (315)793-2554 317 Washington St. Watertown, NY 13601 (315)782-0100
7	Broomet cayuga , Chenango'Cortland / Madison, Onondaga, Oswego, Tioga, Tompkins	P.O.Box 5170, Fisher Ave. Cortland, NY 13045 (607)753-3095 7481 Henry Clay Blvd. Liverpool, NY 130SS (315)428-4497
8	Chemung, Genesee, Livingston, Monroe, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne, Yates	P.O.Box 351 115 Liberty St Bath, NY 14810 (607) 776-2165 6274 Est Avon-Lima Rd. Avon, NY 14414 (716) 226-2466
9	Allegany, Cattaraugus, Chautauqua, Erie, Niagara, Wyoming	215 South Work St. Falconer, NY 14733 (716)665-6111 600 Delwere Ave. Buffalo. NY 14202 (716)847-4550

BILL HITS DRUNKEN BOATERS

Drunken and drugged boaters face tough new penalties in New York starting Aug. 5, under the terms of a bill signed into law by Gov. Mario Cuomo.

"A boat in the hands of a drunken or drugged operator Is just as dangerous and potentially deadly as a motorist driving while under the influence of those substances," state Senate Transportation Committee Chairman Norman Levy. R-Nassau, said of his reason for sponsoring the legislation.

Currently, the state has a drunken boater law, but it carries a maximum fine of \$100 and has no set standards for defining intoxication.

On Aug. 5, police will be able to request boaters to take a chemicaltest followinganyacddent involvingan injury. If the boater refuses, the police can get permission from a judge by radio or telephone to force the boater to take such a test.

A blood-alcohollevel of 0.10 percent and above wifl be evidence of boating while intoxicated. A level of 0.06 to 0.10 percent will be evidence of boating while under the influence of alcohol.

A first offense for boating while intoxicated will allow for a fine of up to \$350. A second offense within five years could lead to a fine of up to\$750 and up to 75 days in jail. A third offense in five years could mean a \$1000 fine and up to 180 days in jail.

If a death is involved, a drunken boater could be fined up to \$5,000 and sentenced up to 7 years in prison. Serious injury could result In a similar fine and a prison sentence of up to 4 years. If any lesser injury is involved, the drunken boater could be fined up to \$1.000 and put in jail for a year.



THE NATURAL DIVERSITY OF ADIRONDACK IAKES

The Adirondack region is a geologically active area where mountains are still rising. This and past glacial activity explain the unique combination of lakes and mountains found in the Adirondacks as no where else in the world.

Some lakes lie on high mountainside or fill deep valleys. Some are deep and dear others are dark with tannins. Some are naturally shallow and nutrient rich and filled with many plants. These are really deep water marshes. Geology accounts for most of this diversity.

Lakes were formed in the deep fault valleys created in the distant geological past. Glaciers scoured the faults into the deep troughs that hold such clear, cold lakes as Lake George and Schroon, Long and Indian Lakes.

Advancing glaciers scoured weaker rock, leaving long basins that Riled with lakes like Upper Saranac or Tupper Lakes, which lie between prongs of harder anorthosite bedrock.

Glacial outwash blocked rivers which emerged from the glaciers creating huge lakes. Piseco Lake is typical of this phenomenon; its ancestor lake once covered a much larger area, reaching south and west through valleys where only small, scattered lakes remain. An ancient lake once covered what is now the Town of North Elba. It has shrunk so that only Lake Placid and Mirror Lake remain.

A few glacial lakes in sandy outwash plains have shrunk to mere streams meandering through sandy plains. Madison Creek flow and the Oswegatchie basin are examples of such former lakes. Bends in winding rivers have occasionally been separated from the main stream, creating oxbow lakes like the one north of Piseco.

Chunks of receding ice left depressions which formed shallow lakes and ponds. Many of these have filled in and are today covered with forests. A few became kettle bogs and wetlands, where there is little flow of water Many are the small ponds which lie throughout the Adirondacks, most notably in such places as the Five Ponds and Pepperbox Wilderness Areas.

Some shallow Adirondack lakes represent later steps in the natural process In which all lakes are gradually being filled in with soil and dying vegetation.

Adirondack lakes also have a diversity of shorelines which determines the quality oftheirwater. Some lakes are fed by clear streams that flow from mountainsides where there is little topsoilandsparse forests. The deep soils of gentler, forested slopes are the watersheds of others. The rock and soil beneath the lakes and in their watersheds determine the chemical and biological characteristics of each.

Man and beaver have created some lakes and ponds; and while these bodies of water differ from natural ones, they now have their own natural characteristics.

Each Adirondack lake supports a dinerent range of plants and animals. Each has its own natural balance, but that balance is not static.. Fortunately, most Adirondack lakes retain their natural characteristics, but human influence has altered the balance of a fewand threatens to change more in the future.

Protecting lakes really means protecting their natural ballance, a setting in which healthy fish, plants, and wildlife can ftourtsh. Reprinted from the APA Citizen's Guide to Adrondack Lakes.









FWf.RATION OF IAKES ASSOCIATIONS, INC.

TOTALMEMBERSHIP
Individual - 50 (25-1985)
Corporate - 11 (10-1985)
\$30 - 56 (46-1985)
\$50 - 29 (22-1985)
\$100 - 24 (17-1985)

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THE AMERICAN MANAGEMENT ASSOCIATION





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BOARD OF DIRECTORS MUTING SATURDAY, OCTOBER 25 10:00 A.M.-4:00P.M.

at

THIE AMERICAN MANAGEMENT ASSOCIATION **CONFERENCE CENNR** Hamilton, New York Luncheon Pro\llded

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A PROPOSAL FOR NEW YORK LAKE AND WATERSHED MANAGEMENT

by Robert E. Burroughs

In attempting to solve New York Lake and Watershed problems which are complex at best and require more than dedicated efforts and good will. Voluntary organizations (associations) do not always have sufficient legal, fiscal and technical resources to provide comprehensive watershed management. Likewise, many municipalities lack some or all of the aforementioned resources. Therefore, what is needed for the effective protection and management of the quality on the water resources of New York Lakes and their Watersheds. is a formal and legally independent management organization; a "WATERSHED MANAGEMENT DISTRICT DIVISION"; composed of "WATERSHED MANAGEMENT DISTRICTS" which in turn are composed of citizens who are representatives on the watersheds, local elected officials (including other than New York citizens and officials in cases of watersheds In two or more states),and New York state officials (appointed or elected, plus staff professionals).

The purpose for which this division is formed should be for the protection of the water resources and other natural assets of New York lakes. tributaries. and watersheds from misuse and pollution; the conservation of the scientific. educational. scenic, water resources, and recreational values of these watersheds.; the encouragement of the continuation and development of compatible land uses in order to improve the over-all environmental and economic position of the area; and preservation and orderly management of the natural resources of the watersheds through "WATERSHED MANAGEMENT DISTRICTS".

THE WATERSHED MANAGEMENT DISTRICT DMSION

A strong Public/Governmental Organization with interest in the New York lakes and their Watersheds that can couple the state of New York with local (citizen/official) representation; with authority to assume management responsibility for the New York lakes and their Watersheds; capable of obtaining technical and financialassistance from outside sources (Public and Private);andcapable of eliminating the label "Public - Private" to New York lakes in the pursuit of restoration and management technology and funds as all lakes in New York are a singular "Water Resource" and therefore segragation should not exist.

WATERSHED MANAGEMENT DISTRICT DIVISION MAKE-UP CHART

NEW YORK DEPARTMENT OF ENVIRONMENTAL
CONSERVATION
DIVISION OF WATER RESOURCES
WATERSHED MANAGEMENT DISTRICT DIVISION
WATERSHED MANAGEMENT DISTRICTS

Watershed Management Districts shall be made up of the following:

LOCAL GOVERNMENT: Elected Official - Staff Appointment. COUNTY GOVERNMENT: Elected Official. PUBLIC PARTIC PATION: Elected

Representative (Lakefront) - Elected Representative (Watershed) - Appointed Representative (Lake Association) - Appointed Representative (Homeowners Association) - Appointed Representative (Business Community).MAJOR WATER PURVEYORS: Staff or Board Appointment. ADVISORS: Legai - Environmental - Engineering - Other.



THE PURPOSE AND OBJECTIVES OF A WATERSHED MANAGEMENT DISTRICT DIVISION

The general objectives of the "WATERSHED MANAGEMENT DISTRICT DIVISION" for the purpose of accomplishing the ongoing restoration and management of the water resources of New York lakes and their watersheds through the "WATERSHED MANAGEMENT DISTRICTS", include. but are not limited to, the following:

- -to protect and/or improve New York lakes and their watersheds.
- to protect public health and welfare.
- to protect public rights.
- to promote environmental values.
- to develop a lake and watershed management plan for New York lakes and their watersheds regardless of public/private status.
- to provide for orderly implementation of a lake and watershed management plan for New York lakes and their watersheds regardless of public/private status.
- to provide for orderly water resource management.
- -administer grant(s) for best possible management projects.
- advise and assist in adminstration of state and federal lands within the watersheds.
- to perform diagnostic studies to evaluate lake and watershed problems.
- determine pollutant sources.
- to provide for implementation of the best management practices (BMP's) to control pollutant loadings to the lakes; such poilutants include, but are not limited to, sediments, nutrients (esp.phosphorus),organic materials. heavy metals,pesticides, fecal bacteria, and other toxic or harmful materials.

Editors Note: The Federation's Board of Directors has identified as one of its main objectives for this year to lobby DEC for the formation of a Bureau of Lakes within - the division of water.



The Federation of Lake Associations

We are a coalition of organizations dedicated ro the preservation and restoration of all lal<es. ponds and rivers throughout New Yor1< State. We welcome and encourage the memberships of lake associations, property owner groups, fish and game clubs, corporntions and individuals. The federation is incorporated under two mirror organizations with the same officers and board of directors.

The Federation of Lal<e Associations. Inc. purposes are:

- .. to provide a clearinghouse of environmental information and expertise in all matters pertaining ro lal<e management.
- to promote by education the wise use and appreciation of the lnkes in New York State.
- to provide a pool of technicalknowledge and expertise to advise and assist member associations and individuals.
- to establish liaison with other environmental groups and agencies.
- to provide a coordinating structure for lake-related research projects.

The Federation of Lakes. Inc. purposes are:

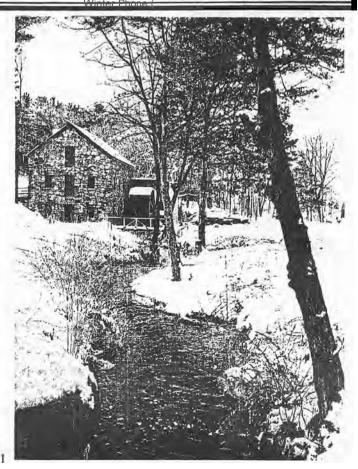
- to monitor and report to members on legislation and administrative actions affecting the waters of New York State.
- to support and lobby for legislation and administrative actions which promote rhe sound management of the warers of New York State.

MEMBERSHIP CATEGORIES	
Associations with up to 99 members	
Associations with 200 or more members	
Membership dues over \$5.00 are tax deductible contributions to the Federation of Lake Associations. to be educational. scientific and public information activities of the Federation.	e used for
APPLICATION FOR MEMBERSHIP	
THE FEDERATION OF LAKEASSOCIATIONS,INC 273 HOLLYWOOD AVE., ROCHESTER.NY 14618	

Type of Membership (please check) u Association o Individual o Corporate

Summer Address ----- Winter Address -----





NOTES AND PUBLICATIONS

The Citium Guide to Adirondack Lakes is a new booklet that describes to homeowners and those who enjoy lakes, how lakes function, common problems which plague Adirondack Lakes. and how to manage lakeshore properties. Copies can be obtained free of charge from the Adirondack Park Agency, Box99, Ray Brook. N.Y. 12977.

The Citzm's Guide to Adirtmdack Rivers and Roads is another booklet recently released by the A.P.A. It describes how to recognize&. protect scenic vistas and trave corridors along rivers and roads. It also discusses dams, railroads, hydropower and the various regulations that protect Adirondack Rivers. This guide is also free of charge from the A.P.A.

Characteristics of NYS Lakes: Gazetteer of Lakes, Ponds and Reservoirs Is a booklet available from DEC's division of Water which lists lake name, county. quandrange. latitude, longitude, elevation, surface area, length of shoreline and water quality classfication.

M echanical Control of Aquatic Weeds is a IS page guide for lake shore owners, lake associations, municipalities and pond owners. Available free from the NYS Department of Environmental Conservation, Division of Water, SO Wolf Road, Albany, NY 12233-0001.

Environment 2000 is a statewide assessment ot Issues and policy needs of N.Y.'s environment for the balance of the century. For information and a copy of the reporton water resources contact RonMiller at DEC

The Federation of Lake Associations, Inc.

273 Hollywood Avenue Rochester, New York 14618 St8-457-6610, Ask for the Project 2000 report entitled *EffiC'imcy, Quality and Quantit y: Getting More Out of the Same Water.*

The New York Planning Federation invites you to attent its conference September 28-30 in Monticello, N_Y_The theme "Stategic Planning for New York State", will focus on choices and alternatives available to local govEmment officials in making decisions which shape the future of their communities. Contack Sheila Clifford St8-489-8116.

Cctpies of this Issue and past issues of *Waurworks* are available to the membership. The Federation enceourages lake association to either photostat or send for additional copies of the newsletter and give to each-member of their Board of Directors. Call john Colgan for these copies.

The North American Lake Management Society will hold its 6th Annual Symposium in Portland, Oregon. The theme is Lake and Reservoir Management: Influ nces of Nonpoint Source Pollutants and Acid Precipitation. Contact (202) 833-3382.

((W. terworks is published four times a year. Individuals who wi to submit material or articles to Waterworks are welcome to contact the E!ditor: Tracey M. Clothier.RR #2 Box 2300. lake George.NY 1284 5. For additional copies of Waterworks and address changes. contact: Or. John Colgan. President. 273 Hollywood Ave.. Rochester. NY 14618. {716} 271-0372. Please note that all mail should be sent through the Rochester office.